Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_

Test Review: Functions

**Summer Jobs** For a summer job you decide to work at “Burgers to Go”. They pay $8.00 per hour but subtract $5.00 for your uniform. You want to calculate how much money you will earn.

1. How much money will you earn if you work 15 hours? \_\_\_\_\_\_ How much will you earn if

you work 20 hours? \_\_\_\_\_\_ How much if you work 25 hours? \_\_\_\_\_\_

2. To calculate your pay, what is the input variable? What is the output variable?

Output Variable

Input Variable

3. Choose letters to represent the variables and write an equation for the “Burgers to Go” function.

Check your equation here

for working 20 hours.

Equation

 5. Complete the graph.

4. Complete the table.

|  |  |
| --- | --- |
| Input  \_\_\_\_\_\_\_\_\_\_ | Output  \_\_\_\_\_\_\_\_\_ |
| 10 |  |
| 15 |  |
| 20 |  |
| 25 |  |
| 30 |  |

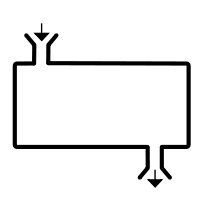
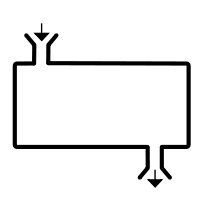
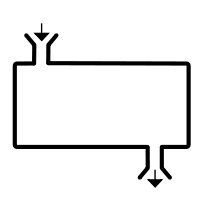
What does the x-axis represent? What does the y-axis represent? Label both axes.

Choose and clearly show a scale on each axis.

At what rate is your money growing for the “”Burgers to Go” function? Use a pink highlighter or pencil to show this growth rate

on the job description, equation, table, and graph.

**Inputs/Outputs** Given an input, determine the corresponding output.

6. 7. 8.

**Is it a Function?** Write the set of ordered pairs for the relations represented by the mapping, table, and graph. Determine if the relation is a function. JUSTIFY your answer.

9. 10. 11.

3

5

7

9

|  |  |
| --- | --- |
| Input | Output |
|  |  |
|  |  |
| 0 | 1 |
| 1 | 3 |
| 2 | 5 |

1

2

3

4

Ordered Pairs: Ordered Pairs: Ordered Pairs:

YES NO? Why? YES NO? Why? YES NO? Why?

**Classify Graphs** Classify each graph 1) as a function or not a function; 2) as linear or non-linear;

3) discrete or continuous; and 4) as increasing, decreasing, neither, or both.



12. 13. 14.

**Qualitative Graphs** The graph shows the temperature in as a function of hours after midnight.

 15. For what interval of time was the temperature increasing the

fastest?

Temperature in

16. How fast was the temperature increasing during that interval?

17. In this context, explain the meaning of the interval when the

graph is decreasing.

Hours after Midnight